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- (h) Measurement procedure. The following spectrum analyzer bandwidth settings should be used for measurement of spurious emissions:
- (1) When operating in the radiotelephony mode or the supervisory audio tone mode:
- (i) For any emission not more than 45 kHz removed from the carrier frequency: 300 Hz;
- (ii) For any emission more than 45 kHz removed from the carrier frequency: 30 kHz.
- (2) When operating in the wideband data mode or the signaling tone mode:
- (i) For any emission not more than 60 kHz removed from the carrier frequency: 300 Hz;
- (ii) For any emission more than 60 kHz removed from the carrier frequency: 30 kHz.

§ 22.919 Electronic serial numbers.

The Electronic Serial Number (ESN) is a 32 bit binary number that uniquely identifies a cellular mobile transmitter to any cellular system.

- (a) Each mobile transmitter in service must have a unique ESN.
- (b) The ESN host component must be permanently attached to a main circuit board of the mobile transmitter and the integrity of the unit's operating software must not be alterable. The ESN must be isolated from fraudulent contact and tampering. If the ESN host component does not contain other information, that component must not be removable, and its electrical connections must not be accessible. If the ESN host component contains other information, the ESN must be encoded using one or more of the following techniques:
- (1) Multiplication or division by a polynomial;
 - (2) Cyclic coding;
- (3) The spreading of ESN bits over various non-sequential memory locations.
- (c) The ESN must be factory set and must not be alterable, transferable, removable or otherwise able to be manipulated. Cellular mobile equipment must be designed such that any attempt to remove, tamper with, or change the ESN chip, its logic system, or firmware originally programmed by

the manufacturer will render the mobile transmitter inoperative.

§ 22.921 911 Call Processing Procedures; 911-Only Calling Mode.

All mobile phones manufactured after February 13, 2000, and capable of operating in an analog mode, i.e., in compliance with "Cellular System Mobile Station—Land Station Compatibility Specification" (April 1981 Ed.) Office of Engineering and Technology Bulletin No. 53, referenced in §22.933 must incorporate a special procedure for processing "9-1-1" calls. Such procedure must recognize when a "9-1-1" call is made and, at such time, must override any programming in the mobile unit that determines the handling of a non-911 call and permit the call to be handled by other analog carriers. This special procedure must incorporate any one or more of the 9-1-1 call system selection processes endorsed or approved by the Commission.

[64 FR 34568, June 28, 1999]

§ 22.923 Cellular system configuration.

Mobile stations communicate with and through base transmitters only. Base transmitters communicate with mobile stations directly or through cellular repeaters. Auxiliary test stations may communicate with base or mobile stations for the purpose of testing equipment.

§ 22.925 Prohibition on airborne operation of cellular telephones.

Cellular telephones installed in or carried aboard airplanes, balloons or any other type of aircraft must not be operated while such aircraft are airborne (not touching the ground). When any aircraft leaves the ground, all cellular telephones on board that aircraft must be turned off. The following notice must be posted on or near each cellular telephone installed in any aircraft:

"The use of cellular telephones while this aircraft is airborne is prohibited by FCC rules, and the violation of this rule could result in suspension of service and/or a fine. The use of cellular telephones while this aircraft is on the ground is subject to FAA regulations."